

Contents

Letters to the Editor

Linear polarimetric observations of SN 1987 A <i>Clocchiatti, A., Marraco, H.G.</i>	L1
Void structure in the Lyman α Forest <i>Pierre, M., Shaver, P.A., Iovino, A.</i>	L3
Hard X-rays and γ -rays from SN 1987 A and mixing of the supernova ejecta <i>Kumagai, S., Itoh, M., Shigeyama, T., Nomoto, K., Nishimura, J.</i>	L7
Rotation-induced mixing and the nitrogen abundance in SN 1987 A <i>Weiss, A., Hillebrandt, W., Truran, J.W.</i>	L11
Radiocontinuum and recombination lines toward CRL 618. Evidence for an ionized stellar wind? <i>Martin-Pintado, J., Bujarrabal, V., Bachiller, R., Gómez-González, J., Planesas, P.</i>	L15
A remarkable molecular outflow in W 28 <i>Harvey, P.M., Forveille, T.</i>	L19
A most peculiar galaxy: IC 860 <i>Kazès, I., Karoji, H., Sofue, Y., Nakai, N., Handa, T.</i>	L22
PHL 932: another non-post-AGB central star of planetary nebula <i>Méndez, R.H., Groth, H.G., Husfeld, D., Kudritzki, R.P., Herrero, A.</i>	L25
The radio halo of NGC 4631: ordered magnetic fields far above the plane <i>Hummel, E., Lesch, H., Wielebinski, R., Schlickeiser, R.</i>	L29

Extragalactic astronomy

The nature of the N-galaxy 3C 120 <i>Moles, M., del Olmo, A., Masegosa, J., Perea, J.D.</i>	1
Ring galaxies with self-consistent haloes <i>Huang, S.-n., Stewart, P.</i>	14
(RN) Predictions for arc polarization <i>Katz, J.I., Jackson, S.</i>	29
Models of galactic chemical evolution: the problem of uniqueness <i>Tosi, M.</i>	33
The effect of metal-rich infall on galactic chemical evolution <i>Tosi, M.</i>	47

The interacting galaxy NGC 5514: a system with off-nuclear activity <i>Fried, J.W., Lutz, D.</i>	52
Variability of QSO 0241 + 622 in the near infrared <i>Lorenzetti, D., Massaro, E., Perola, G.C., Saraceno, P., Strafella, F.</i>	59
Gravitational lenses and the brightness distribution of distant sources <i>Kayser, R., Refsdal, S.</i>	63
Stellar kinematics in SB0 galaxies: NGC 2983 <i>Bettoni, D., Galletta, G., Vallenari, A.</i>	69
A high resolution study of the extended nuclear emission region of NGC 5728 <i>Wagner, S.J., Appenzeller, I.</i>	75

Galactic structure and dynamics

Stellar dynamics of spiral galaxies: self-consistent models <i>Contopoulos, G., Grosbøl, P.</i>	83
Anisotropic tensor virial models for elliptical galaxies with rotation or vorticity <i>Busarello, G., Filippi, S., Ruffini, R.</i>	91
The stellar kinematics of the spiral galaxies NGC 3198 and NGC 3938 <i>Bottema, R.</i>	105

Formation, structure and evolution of stars

Neutrinos in supernovae. I. An exact treatment of transport <i>Mellor, P., Chièze, J.P., Basdevant, J.L.</i>	123
(RN) IRSV 1540-5413: A born-again asymptotic giant branch star? <i>Le Bertre, T., Epchtein, N., Heydari-Malayeri, M.</i>	143
(RN) V 394 Coronae Austrinae: outburst light curves and notes on its position among the recurrent novae <i>Duerbeck, H.W.</i>	148
An observational study of the Herbig Ae star VV Serpentis, and of stars with reflection nebula associated with its dark cloud <i>Chavarria-K., C., de Lara, E., Finkenzeller, U., Mendoza, E.E., Ocegueda, J.</i>	151
(RN) Optical spectroscopy of V 1016 Cygni during 1983-1985 <i>Wallerstein, G.</i>	161

(RN) Observations of [FeVII] and [FeX] in the symbiotic star HM Sagittae during the interval of 1983–1985

Wallerstein, G., Brugel, E.W. 182

Stellar atmospheres

Analysis of CII resonance lines in some main sequence early-type stars

Cugier, H., Hardorp, J. 163

High resolution spectroscopy of CO in the infrared spectra of cool stars. II. Quasi-static molecular dissociation zone in the outer atmosphere of red giant stars

Tsuji, T. 185

VLBI observations of RS Canum Venaticorum and Algol-type binaries

Massi, M., Felli, M., Pallavicini, R., Tofani, G., Palagi, F., Catarzi, M. 200

Electron densities in late-type stars

Byrne, P.B., Dufton, P.L., Kingston, A.E., Lennon, D.J., Murphy, H.M. 205

A non-LTE stellar atmosphere study of nitrogen-rich early-type stars

Schönberner, D., Herrero, A., Becker, S., Eber, F., Butler, K., Kudritzki, R.P., Simon, K.P. 209

(RN) Radiation damping in acoustically heated atmospheres of late-type stars

Umschneider, P. 223

Mean opacities and the structure of optically thin accretion discs

Tylenda, R. 225

Erratum: Rotation of T Tauri stars in the Chamaeleon dark clouds

Franchini, M., Magazzù, A., Stalio, R. 354

Diffuse matter in space (including HII regions and planetary nebulae)

The plausibility of Kolmogorov-type spectra in molecular clouds

Passot, T., Pouquet, A., Woodward, P. 228

Observational evidence of a possible collimating agent of the HH 1–2 outflow

Marcaide, J.M., Torrelles, J.M., Güsten, R., Menten, K.M., Ho, P.T.P., Moran, J.M., Rodriguez, L.F. 235

The IR morphology of the bipolar nebula R Monocerotis/NGC 2261

Aspin, C., McLean, I.S., Rayner, J.T., McCaughrean, M.J. 242

The circumstellar environment of the Herbig Ae/Be stars. The case of AB Aurigae

Blanco, A., Fonti, S., Strafella, F. 249

CO J=2–1 mapping of NGC 1976

White, G.J., Phillips, J.P. 253

Detection of new, high excitation, emission lines of H₂ in the 2.0–2.4 μ m spectrum of the Orion nebula

Oliva, E., Moorwood, A.F.M. 261

Magnitudes of central stars of planetary nebulae

Gathier, R., Pottasch, S.R. 266

Anti-inversion of the 12.1 GHz methanol line towards dark clouds

Walmsley, C.M., Batrla, W., Matthews, H.E., Menten, K.M. 271

The Sun

Spectroscopic analysis of prominence emissions

Bendlin, C., Stellmacher, G., Wiehr, E. 274

Some dynamical aspects of a quiescent filament

Schmieder, B., Poland, A., Thompson, B., Démoulin, P. 281

Photospheric-induced destabilization and ejection of prominence material

Raadu, M.A., Schmieder, B., Mein, N., Gesztelyi, L. 289

Low-energy particle events generated by solar disappearing-in filaments

Heras, A.M., Sanahuja, B., Domingo, V., Joselyn, J.A. 297

The solar granulation in the vicinity of sunspots

Schmidt, W., Grossmann-Doerth, U., Schröter, E.H. 306

The solar system

Io's Alfvén wave pattern and the Jovian decametric arcs

Bagenal, F., Leblanc, Y. 311

C₂, H₂O⁺, and dust distribution in comet P/Halley near opposition

Gammelgaard, P., Thomsen, B. 320

165 Loreley, one of the last large "unknown" asteroids

Schober, H.J., Di Martino, M., Cellino, A. 327

Physical and chemical processes

General solution to the steady-state transport equation for cosmic rays through interplanetary space

Al Bermani, M.J., Daoud, D.S. 331

Cosmic ray spectra and galactic diffuse gamma-ray emission

Dogiel, V.A., Uryson, A.V. 335

Instruments, data processing, and computational methods

(RN) The influence of image motion upon measurements of solar velocity fields

Grigoryev, V.M., Kobanov, N.I. 345

The optimization of the Wilson-Devinney method: An application to CW Cassiopeiae

Barone, F., Maceroni, C., Milano, L., Russo, G. 347

